STATE OF WASHINGTON DEPARTMENT OF FISH & WILDLIFE LANDS AND RESTORATION SERVICES PROGRAM

Salmonid Screening, Habitat Enhancement & Restoration Division (SSHEAR)

OFF-CHANNEL SITE INVENTORY DATA

General Information:

Region: North Coast Observer(s): Powell

River System: Sol Duc Date: 1/27/00

Site Identifier: S-0334 WRIA: 20.0334

River Mile Location: 6.9 RB/LB: RB

Local Name: Unnamed **Trib. to:** 20.0329 (Bear Cr)

Legal Description: NE1/4 Sec17 T30N R11W County: Clallam

Habitat Type: Valley wall tributary

Landowner: (X) Federal () State () County () Other Government () Private

- National Forest, USFS

Directions to site:

Starting at Forks (Tillicum Park), drive north on Highway 101 for 16.3 miles (mp 208) to West Twin Road (FS 30 Road). Take a left on this road and follow for 3.9 miles. This large arch crossing is S-0334.

Site Overview:

This is a large tributary to the mid area of Bear Creek. The gradient averages ~ 5 - 7% throughout the majority of the surveyed reaches except for the lower 400 m reach which is ~2%. There are areas of good spawning gravel and pools that are formed by old large woody debris. Limited coho spawning does take place in the lower reach of this channel. From the egress to the powerlines, the channel has an alder/brush canopy, and some boulder and wood which have formed pools. There is evidence of flushing flows which may limit juvenile use of this stream. Upstream of the powerlines, the channel slowly becomes incised with an increasing gradient gain. Alders are dominant with young conifers on the steep side slopes. There is an abundance of in channel woody debris but it is old. In one area, the channel becomes confined by the steep side slopes; bedrock is prominent and there are several small bedrock falls. Upstream of this point, the valley floor widens and slowly entrenches again. The upper surveyed reach is the east branch tributary. This reach moderates in gradient. Alders mixed with conifers provide the canopy and, there is woody debris, boulders, pools and quality gravel to support trout. Trout habitat extends beyond the survey end point.

Habitat Information:

Water source: Tributaries, springs and surface runoff

Intermittent/year-around:

- Year-around

Estimated flows (cfs): 10

Water temperatures: 5° C

Adjacent stream temperature: 5° C

Other water observations:

Site area measurements: () Indirect (X) Direct () Combination

Widths: Channel- 1.5 m - 4.5 m Ponds- NA Wetlands- NA Depths: Channel- 8 cm - 40 cm Ponds- NA Wetlands- NA

Total length (includes ponds and wetlands): 1525+ m (trout habitat above end point)

Total existing habitat area (est.): 4575 m²

Spawning area: 2000 m² Impounded area: 0 m² Other rearing area: 2575 m²

Spawning Habitat conditions: () None () Poor (X) Fair () Good () Excellent

Describe spawning habitat:

- Downstream of the powerlines, the channel has \sim 2% gradient and areas of quality gravel. There is a moderate amount of pools formed by woody debris
- Upstream of the powerlines, the channel slowly incises and the gradient gradually increases. There is good spawning gravel and woody debris/pools. The gradient is initially ~ 2% and gradually climbs to a bedrock area.
- Upstream of the bedrock area, the channel moderates between 5 and 7% gradient. There are areas with gravel and woody debris/pools.
- This stream is occasionally monitored for coho spawning escapements up to 0.3 miles.
- There was optimum trout habitat at the end of the survey.

Rearing habitat conditions: () None () Poor (X) Fair () Good () Excellent

Describe pond and other rearing habitat:

- Downstream of the powerlines, the channel has an alder/brush canopy. There are variable but moderate amounts of large woody debris for associated pools/in-stream cover.
- Upstream of the powerlines, the channel gradually incises. The gradient moderates to 7% as it reaches a bedrock area where it increases to 10%.
- This reach has an alder dominant canopy but there are small conifers on the steep side slopes. There is an abundance of woody debris in the channel but it is old.
- Upstream of the entrenched area, the valley floor widens and slowly becomes incised again. The gradient moderates between 5 7%. There are less wood and associated pools in this area. Alders still dominate as the canopy species with young conifers on the slopes.
- The upper reach of the survey channel is the east tributary (LB). Boulders and old large woody debris form pools. Conifers become more prominent in the riparian area and the gradient continues to be moderate.
- Trout habitat exists beyond the survey end point.

Describe unaccessible habitat:

Describe wetland: () Bog () Marsh () Scrub-shrub Wetland () Forested Wetland

Flooding potential: () Low (X) Medium () High

- This channel appears to have flushing flows at times.

Fish Information:

Site entry condition to (20.0329): ()Poor () Fair (X) Good

- There is open egress into Bear Creek.

Coho access and use:

Juvenile- () Unknown ()None (X) Poor () Fair () Good Adult- () Unknown ()None (X) Poor () Fair () Good

- Supplemental spawner surveys are conducted on the lower 0.3 miles of this stream.

Other species access and use: () Chum () Pink () Sockeye () Chinook (X) Trout - Trout can utilize this stream.

Habitat Improvements:

Enhancement opportunities:

Additional Comments:

Attachments Available:

Contact respective SSHEAR habitat biologist for the following checked items:

(X) Aerials

(X) Sketch

(X) Maps

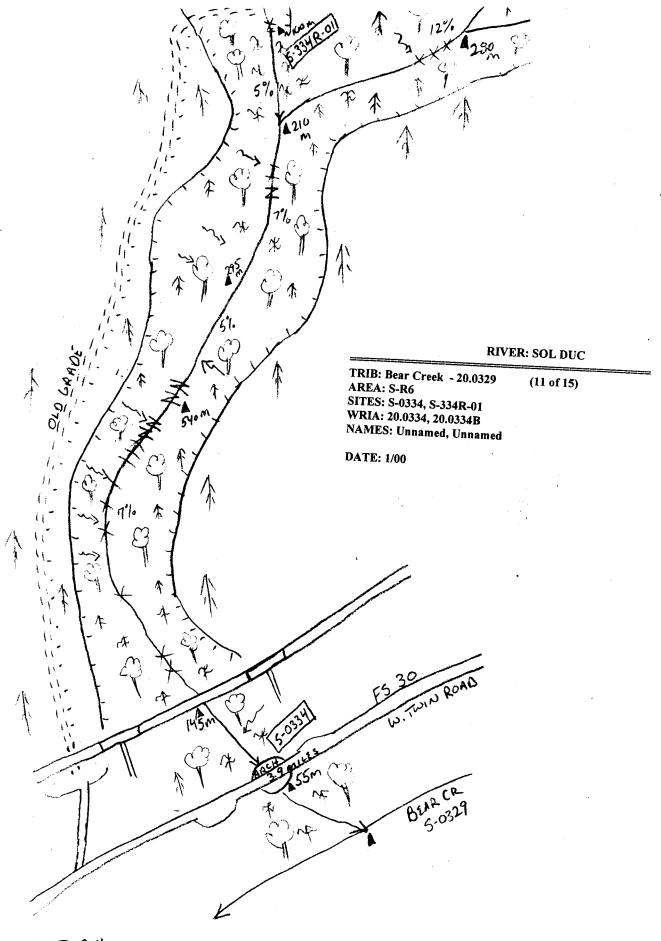
(X) Culvert Report

(X) Other references

() Spawning surveys

() Juvenile trapping

() Fishway Report



16.3 miles EAST ON HWY 101 To mp 208, LFT ON W. TWIN AD/FS 30.

